number, and data covering the processes and tests to which materials and parts are subjected; and

- (ii) A record of reported service difficulties.
- (b) The records and data specified in paragraph (a) of this section shall be—
- (1) Made available, upon the Administrator's request, for examination by the Administrator at any time; and
- (2) Identified and sent to the Administrator as soon as the manufacturer no longer operates under the delegation option procedures.

# Subpart K—Approval of Materials, Parts, Processes, and Appliances

SOURCE: Docket No. 5085, 29 FR 14574, Oct. 24, 1964, unless otherwise noted.

#### §21.301 Applicability.

This subpart prescribes procedural requirements for the approval of certain materials, parts, processes, and appliances.

### § 21.303 Replacement and modification parts.

- (a) Except as provided in paragraph (b) of this section, no person may produce a modification or replacement part for sale for installation on a type certificated product unless it is produced pursuant to a Parts Manufacturer Approval issued under this subpart.
- (b) This section does not apply to the following:
- (1) Parts produced under a type or production certificate.
- (2) Parts produced by an owner or operator for maintaining or altering his own product.
- (3) Parts produced under an FAA Technical Standard Order.
- (4) Standard parts (such as bolts and nuts) conforming to established industry or U.S. specifications.
- (c) An application for a Parts Manufacturer Approval is made to the Manager of the Aircraft Certification Office for the geographic area in which the manufacturing facility is located and must include the following:
- (1) The identity of the product on which the part is to be installed.

- (2) The name and address of the manufacturing facilities at which these parts are to be manufactured.
- (3) The design of the part, which consists of—
- (i) Drawings and specifications necessary to show the configuration of the part; and
- (ii) Information on dimensions, materials, and processes necessary to define the structural strength of the part.
- (4) Test reports and computations necessary to show that the design of the part meets the airworthiness requirements of the Federal Aviation Regulations applicable to the product on which the part is to be installed, unless the applicant shows that the design of the part is identical to the design of a part that is covered under a type certificate. If the design of the part was obtained by a licensing agreement, evidence of that agreement must be furnished.
- (d) An applicant is entitled to a Parts Manufacturer Approval for a replacement or modification part if—
- (1) The Administrator finds, upon examination of the design and after completing all tests and inspections, that the design meets the airworthiness requirements of the Federal Aviation Regulations applicable to the product on which the part is to be installed; and
- (2) He submits a statement certifying that he has established the fabrication inspection system required by paragraph (h) of this section.
- (e) Each applicant for a Parts Manufacturer Approval must allow the Administrator to make any inspection or test necessary to determine compliance with the applicable Federal Aviation Regulations. However, unless otherwise authorized by the Administrator—
- (1) No part may be presented to the Administrator for an inspection or test unless compliance with paragraphs (f)(2) through (4) of this section has been shown for that part; and
- (2) No change may be made to a part between the time that compliance with paragraphs (f)(2) through (4) of this section is shown for that part and the time that the part is presented to the Administrator for the inspection or test.

### §21.305

- (f) Each applicant for a Parts Manufacturer Approval must make all inspections and tests necessary to determine—
- (1) Compliance with the applicable airworthiness requirements;
- (2) That materials conform to the specifications in the design;
- (3) That the part conforms to the drawings in the design; and
- (4) That the fabrication processes, construction, and assembly conform to those specified in the design.
- (g) The Administrator does not issue a Parts Manufacturer Approval if the manufacturing facilities for the part are located outside of the United States, unless the Administrator finds that the location of the manufacturing facilities places no burden on the FAA in administering applicable airworthiness requirements.
- (h) Each holder of a Parts Manufacturer Approval shall establish and maintain a fabrication inspection system that ensures that each completed part conforms to its design data and is safe for installation on applicable type certificated products. The system shall include the following:
- (1) Incoming materials used in the finished part must be as specified in the design data.
- (2) Incoming materials must be properly identified if their physical and chemical properties cannot otherwise be readily and accurately determined.
- (3) Materials subject to damage and deterioration must be suitably stored and adequately protected.
- (4) Processes affecting the quality and safety of the finished product must be accomplished in accordance with acceptable specifications.
- (5) Parts in process must be inspected for conformity with the design data at points in production where accurate determination can be made. Statistical quality control procedures may be employed where it is shown that a satisfactory level of quality will be maintained for the particular part involved.
- (6) Current design drawings must be readily available to manufacturing and inspection personnel, and used when necessary.
- (7) Major changes to the basic design must be adequately controlled and ap-

- proved before being incorporated in the finished part.
- (8) Rejected materials and components must be segregated and identified in such a manner as to preclude their use in the finished part.
- (9) Inspection records must be maintained, identified with the completed part, where practicable, and retained in the manufacturer's file for a period of at least 2 years after the part has been completed.
- (i) A Parts Manufacturer Approval issued under this section is not transferable and is effective until surrendered or withdrawn or otherwise terminated by the Administrator.
- (j) The holder of a Parts Manufacturer Approval shall notify the FAA in writing within 10 days from the date the manufacturing facility at which the parts are manufactured is relocated or expanded to include additional facilities at other locations.
- (k) Each holder of a Parts Manufacturer Approval shall determine that each completed part conforms to the design data and is safe for installation on type certificated products.

[Amdt. 21–38, 37 FR 10659, May 26, 1972, as amended by Amdt. 21–41, 39 FR 41965, Dec. 4, 1974; Amdt. 21–67, 54 FR 39291, Sept. 25, 1989]

## § 21.305 Approval of materials, parts, processes, and appliances.

Whenever a material, part, process, or appliance is required to be approved under this chapter, it may be approved—

- (a) Under a Parts Manufacturer Approval issued under §21.303;
- (b) Under a Technical Standard Order issued by the Administrator. Advisory Circular 20–110 contains a list of Technical Standard Orders that may be used to obtain approval. Copies of the Advisory Circular may be obtained from the U.S. Department of Transportation, Publication Section (M–443.1), Washington, D.C. 20590;
- (c) In conjunction with type certification procedures for a product; or
- (d) In any other manner approved by the Administrator.

[Amdt. 21-38, 37 FR 10659, May 26, 1972, as amended by Amdt. 21-50, 45 FR 38346, June 9, 1090]